

THE WRITINGS AND PICTURES WALKS WITH A SOURCE SOLAR CELL BASED ATMEGA 16

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ABSTRACT

Purpose of making the writings and pictures walks with a source solar cell based ATmega16 is to be able to realization the design of hardware and software in a series of writings and pictures walks with a source solar cell based ATmega16, and know the performance a series of the writings and pictures walks with a source solar cell based ATmega16.

Manufacture of final project uses several step : 1) Identification of needs, 2) Analysis of needs, 3) Implementation / design equipment, 4) Tool making and 5) Testing design and manufacture a series of the writings and pictures walks with a source solar cell based ATmega16 inculed solar cell as supplementary electricity of PLN, IC regulator as a voltage stabilizer 5volt, dot matrix as a component viewers writings and pictures walks, use IC 74HC595 to a series scanning and storage voltage electricity of ACCU. Equipment design soft as a program controller of microcontroller ATmega16 with uses language C and software CodeVisionAVR as compiler program. Program made to process the appearance of the dot matrix and to control scanning speed.

The results obtained are hardware has been successfully made consisting of a series system minimum microcontroller ATmega16 a connected with a series dot matrix and a series scanning are supplied uses voltage of solar cell. Software created uses CodeVisionAVR and tested in a series.

Keywords: Writings, Picture, Microcontroller, Solar Cell, Dot Matrix